

Draft
Environmental Assessment
Interpretative Pavilion Trail at
Madison Buffalo Jump State Park



January 2017

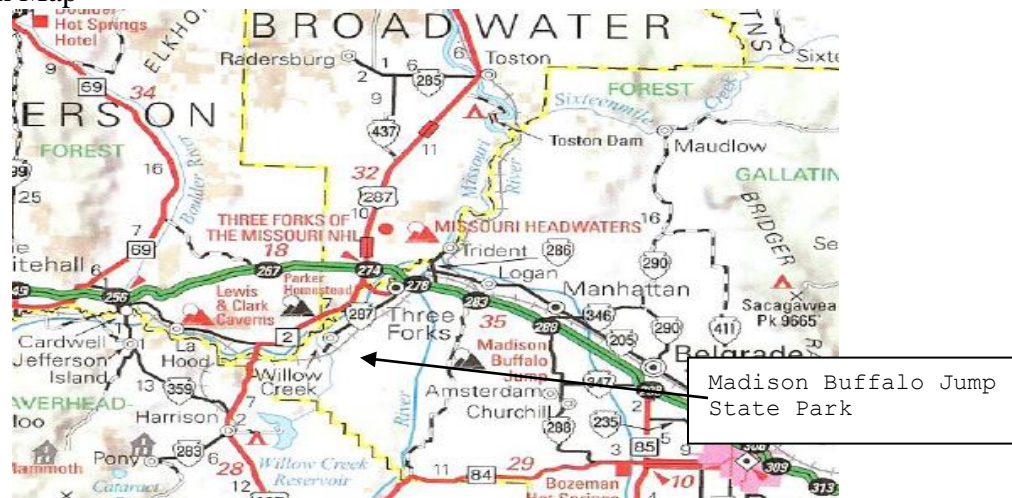


Draft Environmental Assessment MEPA, NEPA, MCA 23-1-110 CHECKLIST

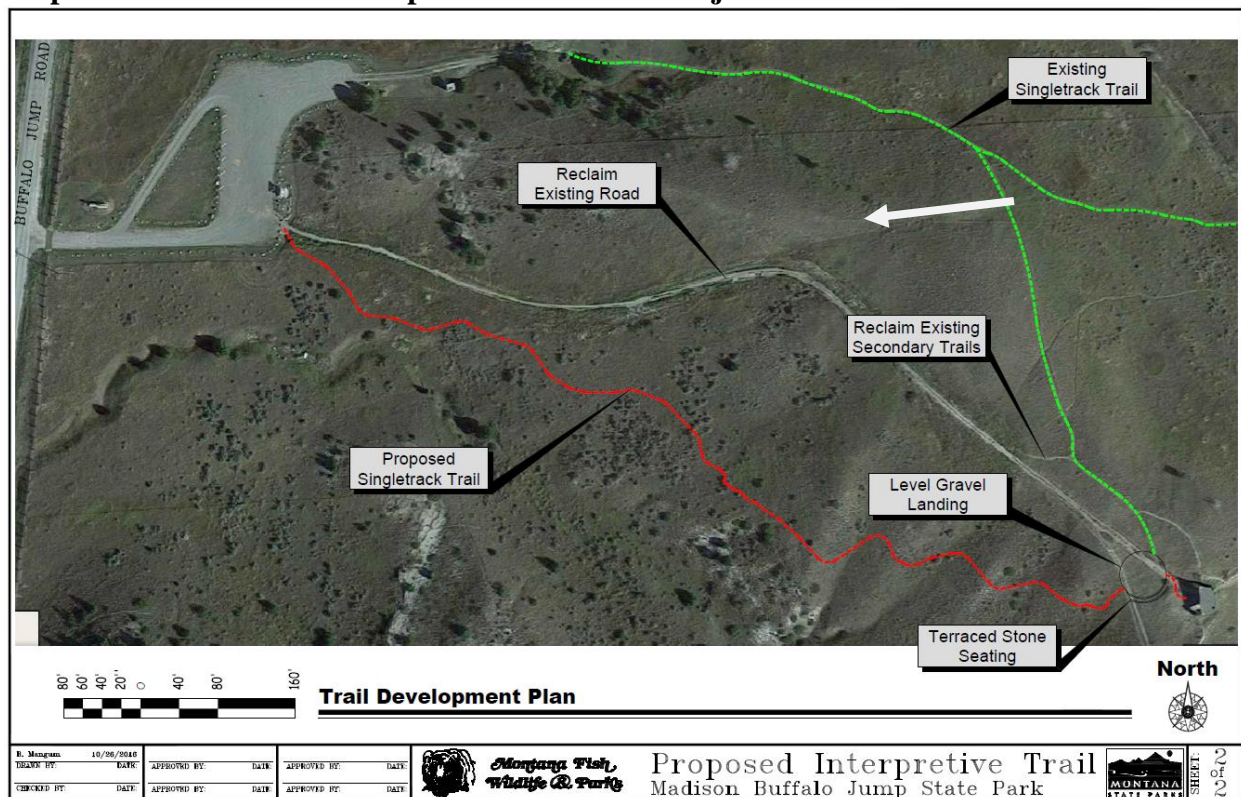
PART I. PROPOSED ACTION DESCRIPTION

1. **Type of proposed state action:** Develop and construct a moderately accessible .25 mile walking interpretative pedestrian trail from the parking area to the interpretative pavilion at Madison Buffalo Jump State Park (MBJSP) and rehabilitate the former access road to prevent further erosion and sediment washing.
2. **Agency authority for the proposed action:** Montana Department of Fish Wildlife and Parks, Montana State Parks Division. MSP has the authority to develop outdoor recreational resources in the state per Section 23-2-101, Montana Code Annotated (MCA). The public involvement for this EA follows Section 23-1-110 MCA and Administrative Rules of Montana (ARM) 12.2.433.
3. **Anticipated Schedule:**
Estimated Commencement Date: September 2017
Estimated Completion Date: October 2017
Current Status of Project Design (% complete): 20%
5. **Location affected by proposed action (county, range and township – included map):** Gallatin County; T1N R2E, Section 34

Location Map



Map of Madison Buffalo Jump State Park Trail Project



6. Project size -- estimate the number of acres that would be directly affected that are currently:

	<u>Acres</u>		<u>Acres</u>
(a) Developed:		(d) Floodplain	<u>0</u>
Residential	<u>0</u>		
Industrial	<u>0</u>	(e) Productive:	
(b) Open Space/ Woodlands/Recreation	<u>1.1</u>	Irrigated cropland	<u>0</u>
(c) Wetlands/Riparian Areas	<u>0</u>	Dry cropland	<u>0</u>
		Forestry	<u>0</u>
		Rangeland	<u>0</u>
		Other	<u>0</u>

7. Permits, Funding & Overlapping Jurisdiction.

- (a) **Permits:** permits will be filed at least 2 weeks prior to project start.
Agency Name Permits
- (b) **Funding:**
Agency Name Funding Amount
 Recreational Trails Program grant to be sought in 2017 cycle
 Gallatin County Historical Society Grant

Montana State Parks
Friends of Madison Buffalo Jump

(c) **Overlapping Jurisdiction:**

Agency Name

Montana Department of Natural Resources and Conservation, (MT-DNRC) Land Use License No. 3073220. DNRC owns 617.5 acres of the land on which the park is located and MSP manages it under the land use license and pays an annual fee to DNRC.

Coordination has occurred with the Bozeman Unit Manager of DNRC and an Improvement Form is being submitted for approval. All necessary approvals will be in place with DNRC before construction begins.

8. Narrative summary of the proposed action:

Madison Buffalo Jump State Park is a 638.4-acre day use only, primitive, cultural park located seven miles south of the community of Logan in Gallatin County. The park protects one of the best-preserved examples of a traditional hunting site commonly called a buffalo jump in the state of Montana. Buffalo jumps were used by Native American peoples to acquire food and other resources from the harvesting of North American Bison or common name Buffalo. It is believed that as many as 14 different American Indian tribes used this site which is a high number of tribes and one of the factors that makes this site so significant. To protect this legacy while still providing visitors access, Montana State Parks wishes to construct an interpretative trail and rehabilitate a closed unused roadway within the park.

The park includes a gravel parking area with a restroom facility near the park entrance on a low area near the county road. From this parking area, trails give visitors access to the various day use areas located throughout the site. One of the most visited areas located within the park is a covered interpretative plaza located on a hill in front of the main buffalo jump. Access to this plaza in past years was with vehicles via a steep gravel road from the parking area. With increased visitation to the park, coupled with the poor design and the steep grade, this access road experienced excessive erosion and sediment flowed off the road surface and onto the lower bench. The road also proved difficult to maintain due to grades exceeding recommended grades. Visitors were most often finding the road in poor repair, with severe washboards and ruts. In 2009 the access road was closed to vehicles and re-designated a walking trail. The steep roadway is difficult for those with mobility issues to access the interpretive pavilion, as a result many visitors don't see any more of the park than the parking area.

To meet the primary objectives of providing reasonable access while protecting our state's valuable resources MSP proposes to construct a sustainable moderately accessible .25 mile pedestrian trail to provide access for the public to the existing interpretative plaza and rehabilitate the former unused road alignment. Rest stops with benches and interpretive panels will be installed along to trail informing visitors of the significance of the site. Incorporated in the interpretative panels may be enhanced technology such as virtual reality, augmented reality or QR code targets that visitors can scan using their mobile devices to access recorded video presentations by park rangers and Native American elders further explaining the significance of this site.



Covered Interpretative Pavilion at MBJSP

The proposed project will fulfill the following needs:

- Allow people of various abilities to have a safe, healthy and enjoyable trail to access the interpretative pavilion at Madison Buffalo Jump State Park.
- Interpret Montana's natural, historical and Native American cultural resources.
- Protect one of Montana's unique cultural heritage sites by providing visitors a well constructed sustainable trail which directs most visitors away from cultural sensitive areas.
- Rehabilitates a closed roadway which is currently experiencing significant erosion issues.

Need for the Action There are several needs needing to be addressed by this action.

- Action is needed to accommodate the increased interest and number of visitors to Madison Buffalo Jump State Park.
- Action is required to safely and comfortably give visitors access to one of the main features of this site.

Implementation of this proposed action would not prevent Montana State Parks from installing a paved access road to the interpretive pavilion under another project should that become a viable alternative. The paved access road is not being evaluated within this environmental assessment.

Objectives for the Action(s); To increase user safety, enjoyment and appreciation of Montana's

natural and cultural heritage resources. To harden and protect an area which is already seeing visitor use.

9. Description and analysis of reasonable alternatives:

Alternative A: No Action

The No Action alternative would be to not construct this trail. Park visitors would continue to use the existing closed roadway, with its steep grade and erosion issues to access the interpretative pavilion. An opportunity to further interpret this important cultural site would be lost. Sediments and other soils would continue to wash down into the parking area during rain events.



Existing former roadway and current trail at MBJSP

Alternative B: Preferred Alternative

The proposed action is to create a gentle meandering .25 mile pedestrian trail with rest stops along the way for visitors to use to access the covered interpretive plaza. This trail will be constructed using hand tools with minimal impact to the surrounding area. The trail will be sustainably designed to allow for proper drainage of water off the trail to minimize erosion. Vegetation removed to construct the new trail would be relocated to the former roadway to rehabilitate that area. Reseeding of all affected areas with native grasses and treatment for noxious weed will be undertaken.

Along the new trail, rest stops with benches and interpretive signage will be installed. Included on the interpretative panels will be codes that visitors with mobile devices could scan to see a downloadable video of a park ranger or Native American Elder talking about the cultural significance of Madison Buffalo Jump.

PART II. ENVIRONMENTAL REVIEW CHECKLIST

V. EVALUATION OF IMPACTS ON THE PHYSICAL ENVIRONMENT

The proposed actions at Madison Buffalo Jump State Park would result in a footprint of disturbance or affected area of approximately 1.1 acres. For purposes of this Environmental Assessment only the Proposed Action will be discussed.

1. Land Resources

Impacts of Proposed Action: The proposed project will have limited impacts on the soils in the area, as construction of the new trail will be done by trail crew using hand tools, not heavy machinery. There will be an overall positive impact to land resources as the old scar of the former roadway will be repaired and contoured to prevent major rain events from washing out sediments down into the parking area as is currently happening. The former road way will be re-vegetated with plants taken from the construction of the new trail along with reseeding with native grasses. FWP project managers will ensure best practices and regulations are followed and treatment and monitoring for noxious weeds in accordance with Montana Fish Wildlife and Parks noxious weed program and plan will be undertaken.

2. Air

Impacts of Proposed Action: Air quality would be very minimally impacted temporarily during construction of the proposed improvements and would return to normal levels after construction. Trail construction will be completed using hand tools therefore dust creation will be minimal.

3. Water

Impacts of Proposed Action: The project area is a considerable distance from any body of water or flowing stream or river. There should be no impacts to ground water as construction is limited to the top layers of soil and is some distance from any wells used in the area.

4. Vegetation

Impacts of the Proposed Action: The proposed project would require clearing some vegetation, mostly native grasses and shrubs. Where ever possible these plants will be reused to rehabilitate the former access road. To mitigate these impacts, FWP will plant native vegetation in disturbed areas and continue to manage the area for noxious weeds in accordance with Montana Fish Wildlife and Parks noxious weed program and plan. The proposed project will likely have a positive impact on the area by provided a clearly identified route for visitors to follow, thereby reducing establishment of social trails. No wetlands or riparian vegetation would be disturbed.

5. Fish/Wildlife

Impacts of the Proposed Action: Parks staff has consulted with FWP Fisheries Biologist Dave Moser and he provided the following comments: I looked over the EA and in conjunction with

our discussion feel this is a very good project. I have no fisheries concerns. From a sediment delivery aspect, retirement of old roads is always of some benefit.

Parks staff has also consulted with FWP area Wildlife Biologist Julie Cunningham regarding wildlife due to this proposed project. Julie commented “In general, this project should not impact wildlife habitat or behavior to a large degree. If anything, I would expect some benefits to wildlife.

I’ve indeed seen the network of “user built” trails, also described as social trails or secondary trails at this park. The construction of a primary access trail combined with the described rehabilitation efforts on secondary trails should generally help confine park visitors to specific routes. There have been numerous studies in the Yellowstone area that suggest wildlife disturbance is less when human activity is predictable and when it falls along specified routes/trails.

Your plans for reclamation of the existing road and secondary trails will be beneficial to the range vegetation. By preventing erosion and reseeding to native vegetation, rangeland health will be promoted and noxious weeds will be controlled. Healthy range vegetation is beneficial to wildlife.

Wildlife species that could be expected in the area of this park include: elk, mule deer, white-tailed deer, pronghorn antelope, wolves, black bear, bobcat, and Hungarian partridge.”

VI. EVALUATION OF IMPACTS ON THE HUMAN ENVIRONMENT

1. Noise Effects

Impacts of the Proposed Action: There would be temporary noise related to construction of the trail and trail side amenities but since the trail is to be built using hand tools the noise will be minimal. If gravel surfacing is required on portions of the trail to provide a suitable surface, small motorized carts or UTV’s will be used to haul the gravel which will produce low level noise for short periods. Noise levels will return to normal after completion of the project.

2. Land Use

Impacts of the Proposed Action: The proposed action will not change land use as this area is currently used as a state park with various trails currently in use. Impact will be positive in providing a more desirable and sustainable route to the interpretive pavilion. The former road will be rehabilitated which will be a positive outcome in reducing erosion.

3. Risk/Health Hazards

Impacts of the Proposed Action: The proposed trail will not create risk or safety hazards. Parks staff and contractors will ensure public access is restricted during construction to prevent the public from being injured by construction activities. The finished trail will be safer for those with mobility issues due to more moderate grades.

4. Community Impact

Impacts of the Proposed Action: The proposed action is positive in providing enhanced access to the interpretive pavilion and would be a benefit to the community. Any impacts will be positive in improving public access and improving outdoor recreation opportunities and education.

5. Public Services/Taxes/Utilities

Impacts of the Proposed Action: There would be no alteration in the need for public services or utilities because of the proposed action. There would be no change in taxes. Maintenance costs associated with the proposed action would be minor and well within normal operations capacity for the park. Maintenance costs are anticipated to decrease due to the project by reducing erosion control on the old road way.

6. Aesthetics/Recreation

Impacts of the Proposed Action: The proposed project will improve recreational activities and is designed to blend in with the environment. Care will be taken to select trail amenities in natural earth tone colors to maintain a natural and pleasing look. Rehabilitating the old roadway

7. Cultural/Historical Resources

Impacts of the Proposed Action: In accordance with the Montana Antiquities Act (22-3-421 to 22-3-442) and with FWPs ARM rules (12.8.501 to 12.8.10), a heritage resource review was conducted by MT State Parks, State Parks' Heritage Resources Program Manager Dr. Sara Scott. After reviewing a recent (2014) cultural resources inventory conducted during a field school by the University of Montana under the supervision of U of M archeological professor Dr. Douglas McDonald there would be no cultural features in the affected areas. A compliance letter has been submitted to SHPO detailing her findings and requesting concurrence. If sites are identified and cannot be avoided, in accordance with MCA 22-3-430, mitigation measures will be devised in consultation with the Montana State Historic Preservation Office (SHPO).

VII. SUMMARY EVALUATION OF SIGNIFICANCE AND NEED FOR EIS

Because of the proposed project being small and designed to protect the land resources while still providing for the public's desire to access a significant heritage resource the impacts to the physical and human environments would be minimal. MSP will mitigate these minimal, adverse impacts by replacing soil and planting native vegetation on any disturbed areas. This project would positively impact local and statewide recreation and tourism related to hiking and wildlife viewing. Based on this analysis, an Environmental Assessment is the appropriate level of analysis and an Environmental Impact Statement is not required.

PUBLIC INVOLVEMENT

The public notice and participation outlined below is appropriate for a project of this scope having limited impacts, which can be mitigated. The public will be notified about this EA and the opportunity to comment through the following actions:

- Two public notices will be published in the *Bozeman Chronicle* and *Independent Record*
- One statewide press release
- Public notice on the Montana State Parks web page: <http://stateparks.mt.gov/>

The public comment period will extend for (30) thirty days and written comments will be accepted until 5:00 p.m., February 23, 2017. The public can submit written comments to Madison Buffalo Jump State Park Trail Project, FWP Region 3 Headquarters, 1400 19th Ave SO, Bozeman, MT 59718, or email to mmarcinek@mt.gov.

PERSONS RESPONSIBLE FOR PREPARING THIS EA

Dave Andrus, Park Manager Missouri Headwaters State Park
Montana State Parks
1585 Trident Road
Three Forks, MT 59752
daveandrus@mt.gov

Matt Marcinek, Region Three Regional Parks Manager
Montana State Parks
1400 S. 19th Ave So
Bozeman, MT, 59718
mmarcinek@mt.gov

List of agencies or offices consulted during preparation of the EA:

Montana Fish, Wildlife & Parks

Parks Division

Wildlife Division

Fisheries Division

Design & Construction

Montana Department of Conservation and Natural Resources (DNRC), Bozeman Unit

Montana State Historic Preservation Office (SHPO)

Montana Department of Commerce – Tourism

APPENDIX A
23-1-110 MCA
PROJECT QUALIFICATION CHECKLIST

Date: 4/15/16

Person Reviewing: Dave Andrus

Project Location: Madison Buffalo Jump State Park

Description of Proposed Work: The proposed action is to create a moderately accessible walking trail from the parking area up a hill to the interpretive pavilion at Madison Buffalo Jump State park. Interpretative signage, and benches, will be installed along the trail.

The following checklist is intended to be a guide for determining whether a proposed development or improvement is of enough significance to fall under 23-1-110 rules.

- ☒ A. New roadway or trail built over undisturbed land?
Comments: A new trail will be constructed by trail crew using hand tools, grass and soil removed will be utilized in the rehabilitation of an abandoned roadway the new trail is replacing.
- ☐ B. New building construction (buildings <100 sf and vault latrines exempt)?
Comments: No buildings will be built.
- ☐ C. Any excavation of 20 c.y. or greater?
Comments: Any soil excavated during construction will be reused on site.
- ☐ D. New parking lots built over undisturbed land or expansion of existing lot that increases parking capacity by 25% or more?
Comments: Project will utilize an existing parking area. No changes will be made to the existing parking area as there is adequate capacity to accommodate trails users.
- ☐ E. Any new shoreline alteration that exceeds a doublewide boat ramp or handicapped fishing station?
Comments: Project is not near any shoreline of lake, river or stream.
- ☐ F. Any new construction into lakes, reservoirs, or streams?
Comments: Project is not near any shoreline of lake, river or stream.
- ☒ G. Any new construction in an area with National Registry quality cultural artifacts (as determined by State Historical Preservation Office)?
Comments: A recent cultural artifact survey was completed in the project area in 2014 and no cultural artifacts were found in the project area. A compliance letter has been submitted to SHPO by MT State Parks.
- ☐ H. Any new above ground utility lines?
Comments: None
- ☐ I. Any increase or decrease in campsites of 25% or more of an existing number of campsites?
Comments: Madison Buffalo Jump State Park is a day use only facility.
- ☐ J. Proposed project significantly changes the existing features or use pattern; including effects of a series of individual projects?
Comments: none

If any of the above are checked, 23-1-110 MCA rules apply to this proposed work and should be documented on the MEPA/HB495 CHECKLIST. Refer to MEPA/HB495 Cross Reference Summary for further assistance.

APPENDIX B
TOURISM REPORT
MONTANA ENVIRONMENTAL POLICY ACT (MEPA)/HB495

The Montana Department of Fish, Wildlife and Parks has initiated the review process as mandated by HB495 and the Montana Environmental Policy Act in its consideration of the project described below. As part of the review process, input and comments are being solicited. Please complete the project name and project description portions and submit this form to:

Jan Stoddard, Director of Sales & Constituent Services
Montana Office of Tourism -Department of Commerce
301 S. Park Ave.
Helena, MT 59601

Project Name: Madison Buffalo Jump State Park Interpretive Trail Project

Project Description: The Montana Department of Fish, Wildlife and Parks, Parks division wishes to construct a moderately accessible sustainable interpretative pedestrian trail from the parking area to the interpretative pavilion at Madison Buffalo Jump State Park and rehabilitate the former access road to prevent further erosion and sediment washing. The new trail will provide enhanced opportunities to view the Jump, learn about its history and cultural significance, and appreciate the resources contained within the park.

1. Would this site development project have an impact on the tourism economy?
- NO **YES**
If YES,
Yes, as described, this project has the potential to positively impact the tourism and recreation industry economy if properly maintained. Allowing people of various abilities to have a safe, healthy and enjoyable trail to access the interpretative pavilion can increase the number of visitors and the amount of time spent at Madison Buffalo Jump State Park. We are assuming the agency has determined it has necessary funding for the on-going operations and maintenance once this project is complete.

2. Does this impending improvement alter the quality or quantity of recreation/tourism opportunities and settings?

NO **YES**
If YES,

Yes, as described, this project has the potential to positively impact the tourism and recreation industry economy if properly maintained. Adding enhancements such as rest stops with benches, interpretive panels with technology providing additional information will enhance the quality of the visitor experience. We are assuming the agency has determined it has necessary funding for the on-going operations, technology updates, and maintenance once this project is complete.

Signature Jan Stoddard Date 1/9/2017